

REMARKS

Claims 1, 5-11, and 24-32 are pending in the present Application. Claims 1, and 7-11 have been amended, claims 24-32 have been withdrawn, and no claims have been added, leaving claims 1, and 5-11 for consideration upon entry of the present Amendment.

Claim 1 has been amended to better define the invention. In particular, claim 1 has been amended to clarify that the claim is directed to isolated nucleic acid molecule consisting of: (a) nucleotides 390-4880 of SEQ ID NO: 1; (b) nucleotides 390-4883 of SEQ ID NO: 1; (c) nucleotides 12-4904 of SEQ ID NO: 3; (d) nucleotides 12-4907 of SEQ ID NO: 3; (e) the complement of nucleotides 390-4880 of SEQ ID NO: 1; (f) the complement of nucleotides 390-4883 of SEQ ID NO: 1; (g) the complement of nucleotides 12-4904 of SEQ ID NO: 3; or (h) the complement of nucleotides 12-4907 of SEQ ID NO: 3. Applicants believe that this amendment is fully supported by claim 2-4, as originally filed, page 3, lines 25-26, page 20, lines 5-15 and throughout the specification.

Claims 7 and 8 have been amended for consistency.

Claim 10 has been amended to clarify that the method for producing a polypeptide comprising "transforming a host cell with an isolated nucleic acid molecule selected from the group consisting of: (a) nucleotides 390-4880 of SEQ ID NO: 1; (b) nucleotides 390-4883 of SEQ ID NO: 1; (c) nucleotides 12-4904 of SEQ ID NO: 3; or (d) nucleotides 12-4907 of SEQ ID NO: 3." Support for this amendment can be found at least at page 20, lines 5-14, and throughout the specification.

Claims 9 and 11 have been amended to correct typographical errors.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Examiner Interview

Applicant thank Examiner Nguyen for the courtesy of a telephonic interview with Applicant's representative (Ian J.S. Lodovico) on June 12, 2009. The outstanding §102(e) and §103(a) rejections were discussed, as well as proposed claim amendments to overcome the §102(e) rejections. Applicants further acknowledge the Examiner Interview Summary dated June 17, 2009.

Claim Objections

Claims 9 and 11 are objected to because of the phrases “A host cell . . . prokaryotic host cells and eukaryotic host cells” and “said host cell . . . prokaryotic host cells and eukaryotic host cells,” respectively. (Office Action dated 4/10/2009, page 2) The Examiner further requested that claims 9 and 11 be consistent with either a host cell or host cells. (Office Action dated 4/10/2009, page 3)

For consistency, Applicants have amended claims 9 and 11 to recited “wherein said host cell is selected from the group consisting of a prokaryotic host cell and an eukaryotic host cell.” Applicants believe these amendments overcome the Examiner’s objection to claims 9 and 11. Applicants respectfully request reconsideration and withdrawal of the objection.

Claim Rejections Under 35 U.S.C. § 102(e)

Claims 7 and 10-11 are rejected under 35 U.S.C. § 102(c), as anticipated by Tsuji et al. (US 6,015,680)(hereinafter “Tsuji”) as evidenced by Lee et al. (US 2006/0168670)(hereinafter “Lee”). (Office Action dated 4/10/2009, page 3) In making the rejection, the Examiner stated:

Tsuji discloses a method of producing a polypeptide comprising a host cell transformed with the nucleic acid molecule of claim 1 under conditions in which a protein encoded by said nucleic acid molecule is expressed. . . . The human lung adenocarcinoma Calu-3 cells would inherently express or contain the nucleic acid molecule of claim 1 as evidence by the teachings of Lee et al which disclosed that lung adenocarcinoma cells overexpressed human LFG1 sequences (SEQ ID NO:1 or 3) 5.77 X relative to normal lung cells.

Accordingly, the teachings or Tsuji et al meet every limitation of the instant claims as broadly written.

(Office Action dated 4/10/2009, pages 3-4) Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

As amended, claim 7 is directed to a host cell transformed with the isolated nucleic acid molecule of claim 1. Claims 10 and 11 are directed to a method of producing a polypeptide comprising culturing a host cell transformed with an isolated nucleic acid molecule selected from the group consisting of: (a) nucleotides 390-4880 of SEQ ID NO: 1; (b) nucleotides 390-4883 of SEQ ID NO: 1; (c) nucleotides 12-4904 of SEQ ID NO: 3; or (d) nucleotides 12-4907 of SEQ ID NO: 3.”

Tsuji broadly discloses a method of culturing an established lung adenocarcinoma cell line (Calu-3). Lee is cited for demonstrating cultured Calu-3 cell lines would inherently express or contain the nucleic acid molecule of claim 1, as Lee discloses a lung adenocarcinoma cell line that overexpressed human LFG1. However, Tsuji, nor Lee, disclose a host cell transformed with the *isolated* nucleic acid molecule as recited in claim 1.

As all elements of claim 1 are not taught by Tsuji, Tsuji cannot anticipate claim 1. Applicants request withdrawal of the rejection of claims 7 and 10-11 as anticipated by Tsuji.

Claims 1 and 5-8 are rejected under 35 U.S.C. § 102(e), as anticipated by Venter et al. (WO 02/068579) (hereinafter “Venter”). (Office Action dated 4/10/2009, pages 4-5) Applicants respectfully traverse this rejection.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

Claim 1 is amended herein to be directed to an isolated nucleic acid molecule consisting of: (a) nucleotides 390-4880 of SEQ ID NO: 1; (b) nucleotides 390-4883 of SEQ ID NO: 1; (c) nucleotides 12-4904 of SEQ ID NO: 3; (d) nucleotides 12-4907 of SEQ ID NO: 3; (e) the complement of nucleotides 390-4880 of SEQ ID NO: 1; (f) the complement of nucleotides 390-4883 of SEQ ID NO: 1; (g) the complement of nucleotides 12-4904 of SEQ ID NO: 3; or (h) the complement of nucleotides 12-4907 of SEQ ID NO: 3.

Venter is generally directed to the sequencing and assembly of the human genome. (Abstract) However, Venter does not disclose the claimed *isolated* nucleic acid molecule recited in claim 1.

As all elements of claim 1 are not taught by Venter, Venter cannot anticipate claim 1. Applicants request withdrawal of the rejection of claims 1 and 5-11 as anticipated by Venter

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1, 6, and 8-11 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Venter in view of Kuo et al. (EP 0150735). (Office Action dated 4/10/2009, page 6) Applicants respectfully traverse this rejection.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied

upon, or knowledge generally available in the art at the time of the invention, must provide some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). “A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). To find obviousness, the Examiner must “identify a reason that would have prompted a person of ordinary skill in the art in the relevant field to combine the elements in the way the claimed new invention does.” *Id.*

Amended claim 1 is directed to an isolated nucleic acid molecule consisting of: (a) nucleotides 390-4880 of SEQ ID NO: 1; (b) nucleotides 390-4883 of SEQ ID NO: 1; (c) nucleotides 12-4904 of SEQ ID NO: 3; (d) nucleotides 12-4907 of SEQ ID NO: 3; (e) the complement of nucleotides 390-4880 of SEQ ID NO: 1; (f) the complement of nucleotides 390-4883 of SEQ ID NO: 1; (g) the complement of nucleotides 12-4904 of SEQ ID NO: 3; or (h) the complement of nucleotides 12-4907 of SEQ ID NO: 3. Claims 6 and 8-11 depend directly or indirectly from claim 1.

As discussed above, Venter fails to teach each and every element of claim 1. Therefore Kuo must make up for these deficiencies of Venter.

Kuo is generally directed to methods and compositions for preparation of Factor VIIIIC. (Abstract) However, Applicants can find no place in Kuo teaching the isolated nucleic acid molecule recited in claim 1.

As Venter and Kuo, taken alone or in combination, fail to teach or suggest all elements of independent claim 1, claim 1 and dependent claims 6 and 8-11 cannot be obvious over the combination.

Applicants request withdrawal of the rejection of claims 6 and 8-11 as obvious over Venter in view of Kuo.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By /Ian J.S. Lodovice/
Ian J. S. Lodovice
Registration No. 59,749

Date: July 7, 2009
CANTOR COLBURN LLP
20 Church Street, 22nd Floor
Hartford, CT 06130-3207
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No.: 23413